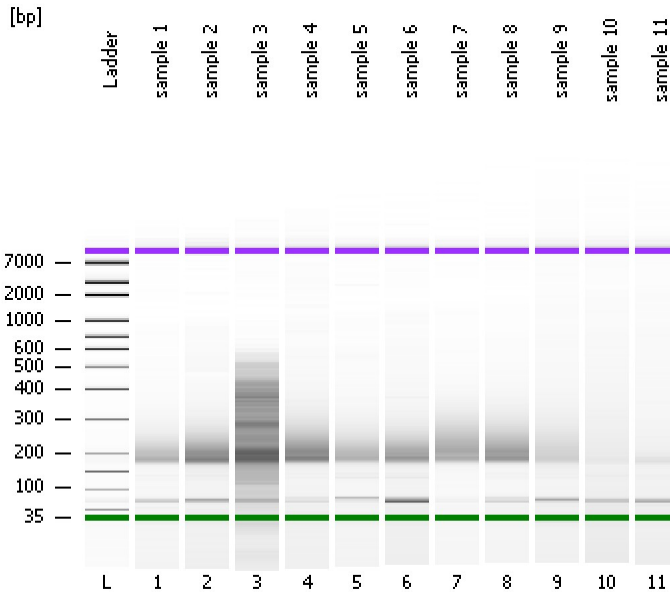


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-02-06\2019-02-06_001.xad

Created: 2/6/2019 2:21:22 PM
Modified: 2/6/2019 3:02:40 PM

Electrophoresis File Run Summary



Instrument Information:

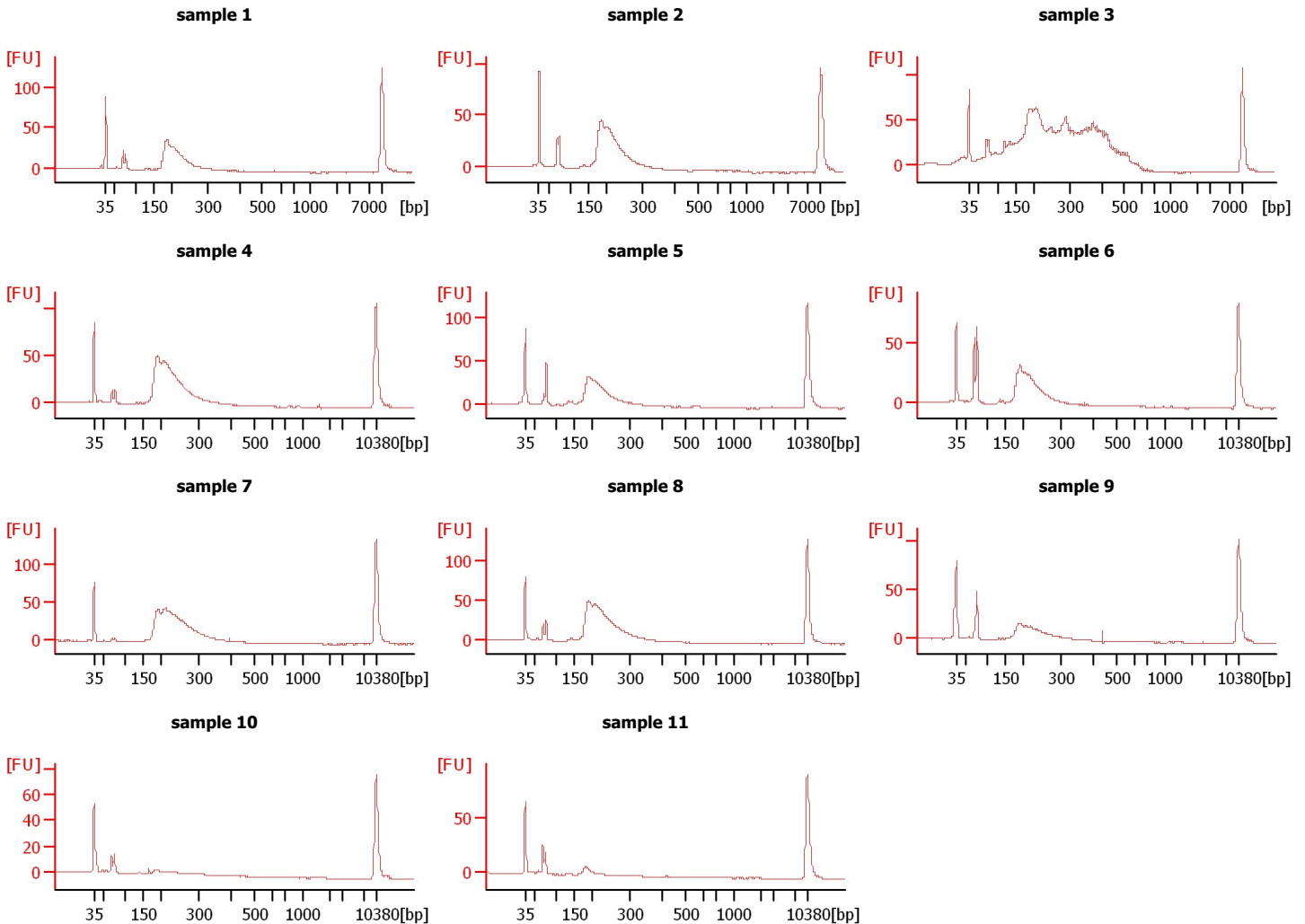
Instrument Name: DE34903152 Firmware: C.01.069
Serial#: DE34903152 Type: G2938C

Assay Information:

Assay Origin Path: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\assays\dsDNA\High Sensitivity DNA.xsy
Assay Class: High Sensitivity DNA Assay
Version: 1.03
Assay Comments: Copyright © 2003-2010 Agilent Technologies

Chip Information:

Chip Lot #: Reagent Kit Lot #: Chip Comments:



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-02-06\2019-02-06_001.xad

Created: 2/6/2019 2:21:22 PM
 Modified: 2/6/2019 3:02:40 PM

Electrophoresis File Run Summary (Chip Summary)

| Sample Name | Sample Comment | Rest. Digest | Status | Observation | Result Label | Result Color |
|-------------|----------------|--------------------------|--------|-------------|--------------|--------------|
| sample 1 | | <input type="checkbox"/> | ✓ | | | |
| sample 2 | | <input type="checkbox"/> | ✓ | | | |
| sample 3 | | <input type="checkbox"/> | ✓ | | | |
| sample 4 | | <input type="checkbox"/> | ✓ | | | |
| sample 5 | | <input type="checkbox"/> | ✓ | | | |
| sample 6 | | <input type="checkbox"/> | ✓ | | | |
| sample 7 | | <input type="checkbox"/> | ✓ | | | |
| sample 8 | | <input type="checkbox"/> | ✓ | | | |
| sample 9 | | <input type="checkbox"/> | ✓ | | | |
| sample 10 | | <input type="checkbox"/> | ✓ | | | |
| sample 11 | | <input type="checkbox"/> | ✓ | | | |
| Ladder | | <input type="checkbox"/> | ✓ | | | |

Chip Lot #

Reagent Kit Lot #

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-02-06\2019-02-06_001.xad

Created: 2/6/2019 2:21:22 PM
Modified: 2/6/2019 3:02:40 PM

Electrophoresis Assay Details

General Analysis Settings

Number of Available Sample and Ladder Wells (Max.) : 12
Minimum Visible Range [s] : 32
Maximum Visible Range [s] : 138
Start Analysis Time Range [s] : 33
End Analysis Time Range [s] : 137.5
Ladder Concentration [pg/μl] : 1950
Uses Standard Area for Ladder Fragments
Lower Marker Concentration [pg/μl] : 125
Upper Marker Concentration [pg/μl] : 75
Used Upper Marker for Quantitation
Standard Curve Fit is Point to Point
Show Data Aligned to Lower and Upper Marker

Integrator Settings

Integration Start Time [s] : 33.05
Integration End Time [s] : 137
Slope Threshold : 0.8
Height Threshold [FU] : 5
Area Threshold : 0.1
Width Threshold [s] : 0.6
Baseline Plateau [s] : 0.5

Filter Settings

Filter Width [s] : 0.5
Polynomial Order : 4

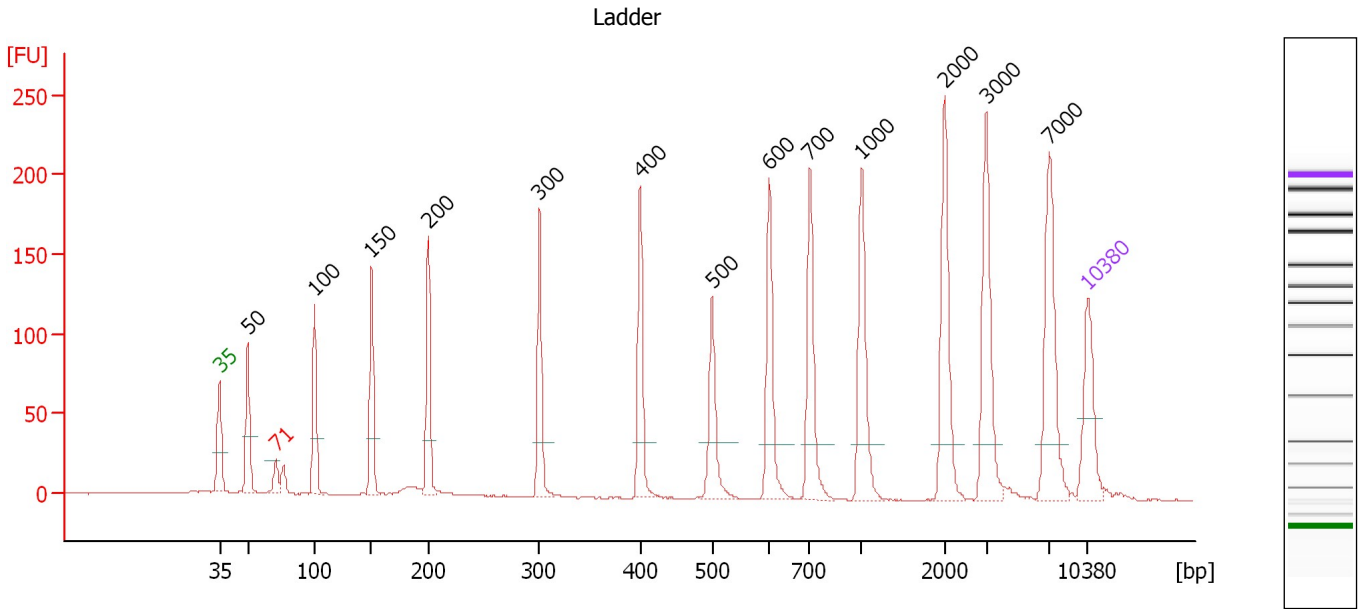
Ladder

| Ladder Peak | Size | Area |
|-------------|-------|------|
| 1 | 35 | 160 |
| 2 | 50 | 210 |
| 3 | 100 | 208 |
| 4 | 150 | 221 |
| 5 | 200 | 242 |
| 6 | 300 | 270 |
| 7 | 400 | 305 |
| 8 | 500 | 306 |
| 9 | 600 | 336 |
| 10 | 700 | 321 |
| 11 | 1000 | 366 |
| 12 | 2000 | 413 |
| 13 | 3000 | 411 |
| 14 | 7000 | 400 |
| 15 | 10380 | 214 |

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-02-06\2019-02-06_001.xad

Created: 2/6/2019 2:21:22 PM
 Modified: 2/6/2019 3:02:40 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.3

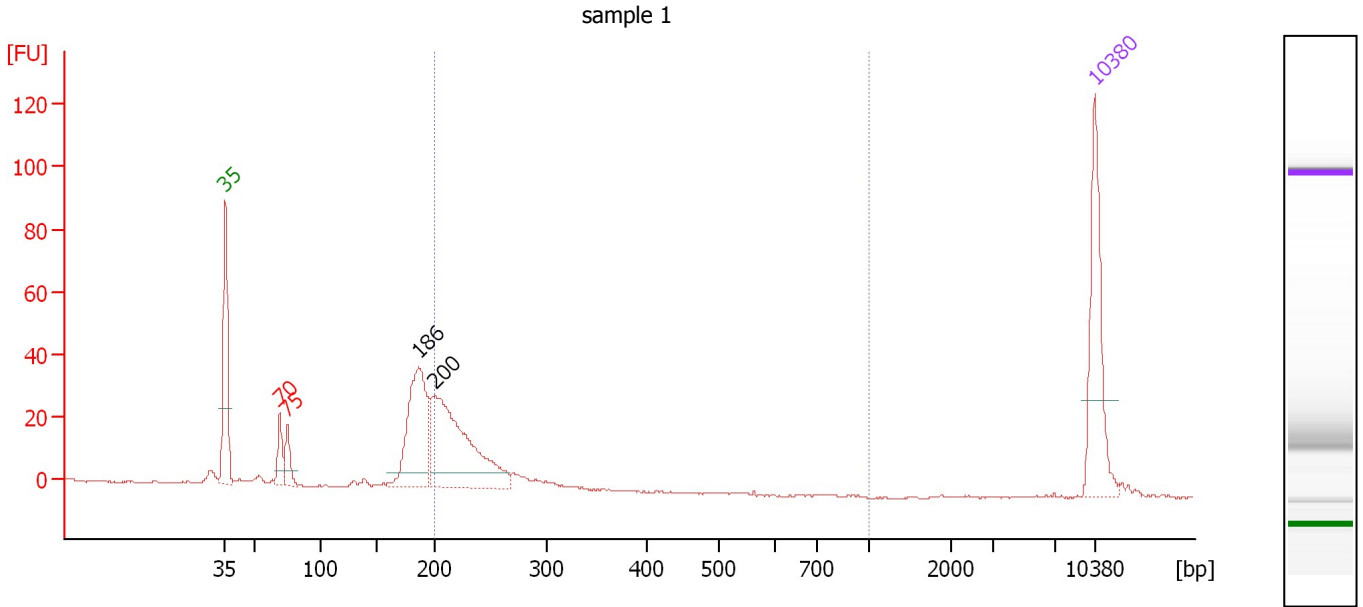
Peak table for Ladder

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations | Aligned Migration Time [s] |
|------|-----------|---------------|-------------------|---------------|----------------------------|
| 1 | 35 | 125.00 | 5,411.3 | Lower Marker | 43.00 |
| 2 | 50 | 150.00 | 4,545.5 | Ladder Peak | 45.28 |
| 3 | 71 | 0.00 | 0.0 | excluded peak | 47.55 |
| 4 | 100 | 150.00 | 2,272.7 | Ladder Peak | 50.65 |
| 5 | 150 | 150.00 | 1,515.2 | Ladder Peak | 55.25 |
| 6 | 200 | 150.00 | 1,136.4 | Ladder Peak | 59.84 |
| 7 | 300 | 150.00 | 757.6 | Ladder Peak | 68.78 |
| 8 | 400 | 150.00 | 568.2 | Ladder Peak | 76.90 |
| 9 | 500 | 150.00 | 454.5 | Ladder Peak | 82.71 |
| 10 | 600 | 150.00 | 378.8 | Ladder Peak | 87.30 |
| 11 | 700 | 150.00 | 324.7 | Ladder Peak | 90.57 |
| 12 | 1,000 | 150.00 | 227.3 | Ladder Peak | 94.74 |
| 13 | 2,000 | 150.00 | 113.6 | Ladder Peak | 101.44 |
| 14 | 3,000 | 150.00 | 75.8 | Ladder Peak | 104.79 |
| 15 | 7,000 | 150.00 | 32.5 | Ladder Peak | 109.86 |
| 16 | 10,380 | 75.00 | 10.9 | Upper Marker | 113.00 |

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-02-06\2019-02-06_001.xad

Created: 2/6/2019 2:21:22 PM
 Modified: 2/6/2019 3:02:40 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : sample 1

Number of peaks found: 2 Corr. Area 1: 167.1
 Noise: 0.3

Peak table for sample 1 : sample 1

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations | Aligned Migration Time [s] |
|------|-----------|---------------|-------------------|---------------|----------------------------|
| 1 | 35 | 125.00 | 5,411.3 | Lower Marker | 43.00 |
| 2 | 70 | 29.68 | 646.5 | excluded peak | 47.38 |
| 3 | 75 | 28.00 | 564.6 | excluded peak | 47.98 |
| 4 | 186 | 145.65 | 1,185.0 | | 58.58 |
| 5 | 200 | 212.51 | 1,611.7 | | 59.82 |
| 6 | 10,380 | 75.00 | 10.9 | Upper Marker | 113.00 |

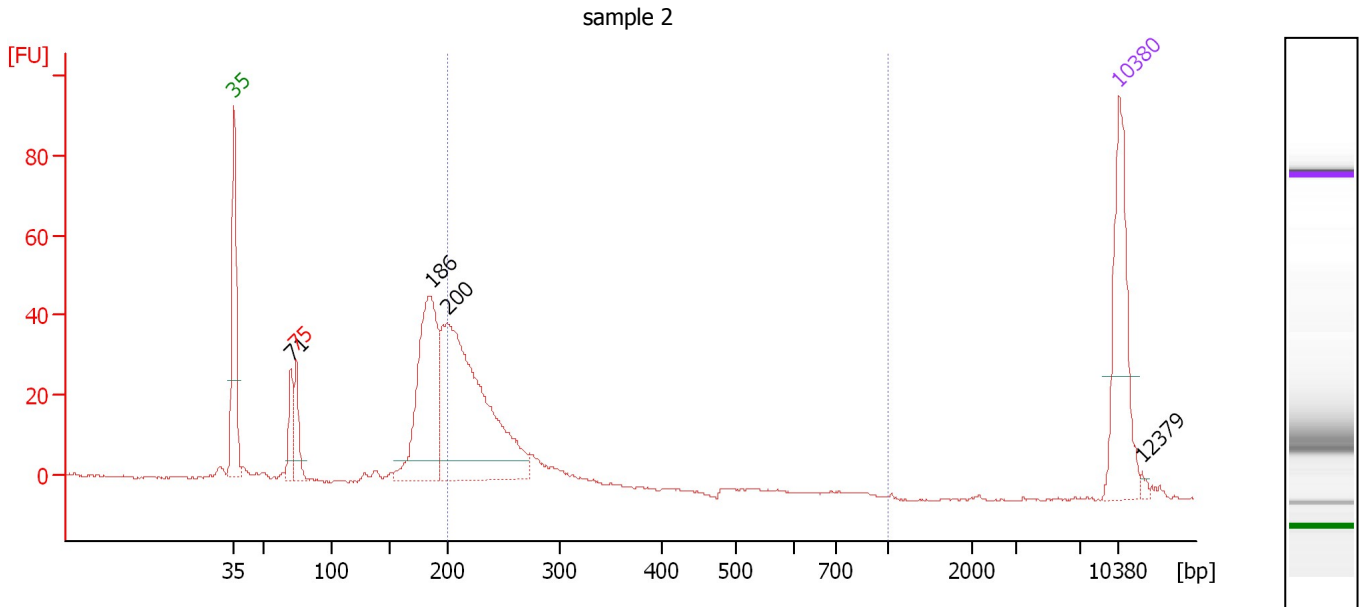
Region table for sample 1 : sample 1

| From [bp] | To [bp] | Average Size [bp] | Conc. [pg/μl] | Corr. Area | Molarity [pmol/l] | Co % of Ior Total | Size distribution in CV [%] |
|-----------|---------|-------------------|---------------|------------|-------------------|-------------------|-----------------------------|
| 200 | 1,000 | 229 | 189.52 | 167.1 | 1,256.8 | 46 | 11.0 |

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-02-06\2019-02-06_001.xad

Created: 2/6/2019 2:21:22 PM
 Modified: 2/6/2019 3:02:40 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : sample 2

Number of peaks found: 4 Corr. Area 1: 270.7
 Noise: 0.3

Peak table for sample 2 : sample 2

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations | Aligned Migration Time [s] |
|------|-----------|---------------|-------------------|---------------|----------------------------|
| 1 | 35 | 125.00 | 5,411.3 | Lower Marker | 43.00 |
| 2 | 71 | 34.56 | 739.6 | | 47.51 |
| 3 | 75 | 38.93 | 789.3 | excluded peak | 47.93 |
| 4 | 186 | 187.16 | 1,524.3 | | 58.56 |
| 5 | 200 | 324.09 | 2,452.1 | | 59.87 |
| 6 | 10,380 | 75.00 | 10.9 | Upper Marker | 113.00 |
| 7 | 12,379 | 0.00 | 0.0 | | 114.86 |

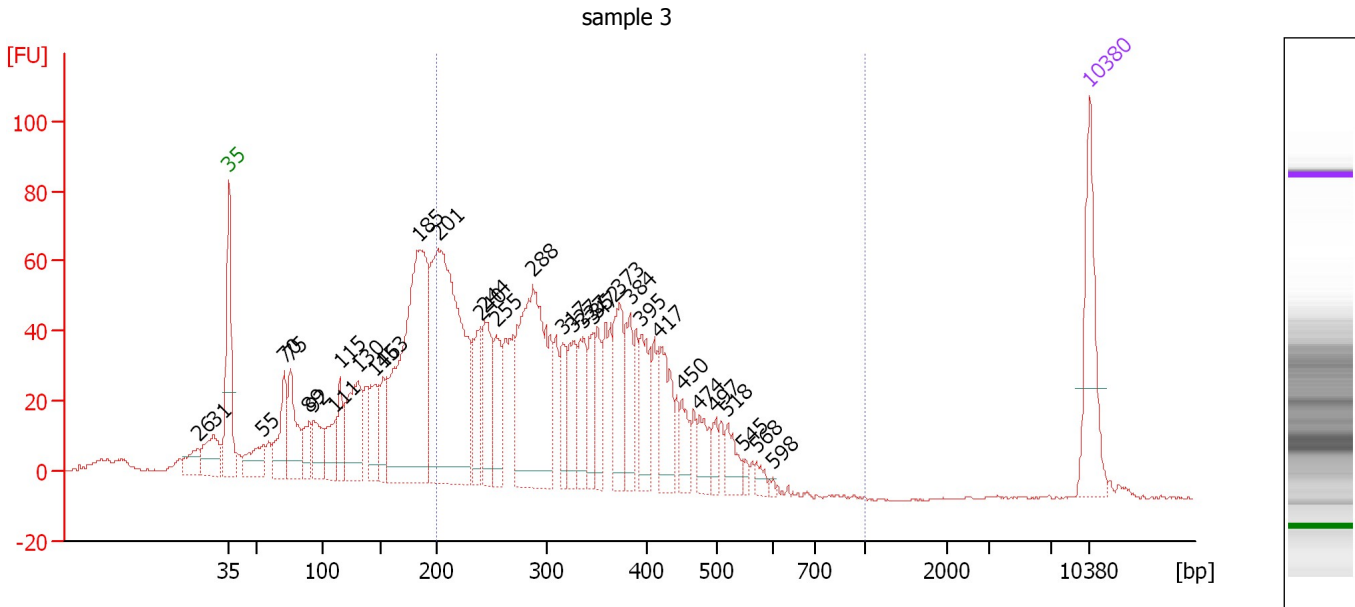
Region table for sample 2 : sample 2

| From [bp] | To [bp] | Average Size [bp] | Conc. [pg/μl] | Corr. Area | Molarity [pmol/l] | Co % of lor Total | Size distribution in CV [%] |
|-----------|---------|-------------------|---------------|------------|-------------------|-------------------|-----------------------------|
| 200 | 1,000 | 234 | 306.30 | 270.7 | 1,994.0 | 50 | 12.8 |

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-02-06\2019-02-06_001.xad

Created: 2/6/2019 2:21:22 PM
 Modified: 2/6/2019 3:02:40 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : sample 3

Number of peaks found: 34 Corr. Area 1: 1,394.4
 Noise: 0.3

Peak table for sample 3 : sample 3

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations | Aligned Migration Time [s] |
|------|-----------|---------------|-------------------|--------------|----------------------------|
| 1 | 26 | 0.00 | 0.0 | | 40.53 |
| 2 | 31 | 0.00 | 0.0 | | 41.74 |
| 3 | 35 | 125.00 | 5,411.3 | Lower Marker | 43.00 |
| 4 | 55 | 48.93 | 1,356.8 | | 45.78 |
| 5 | 70 | 74.34 | 1,600.3 | | 47.47 |
| 6 | 75 | 81.21 | 1,635.5 | | 47.99 |
| 7 | 89 | 36.85 | 624.8 | | 49.51 |
| 8 | 92 | 51.02 | 838.6 | | 49.81 |
| 9 | 111 | 44.73 | 612.3 | | 51.63 |
| 10 | 115 | 39.40 | 519.5 | | 52.02 |
| 11 | 130 | 114.02 | 1,324.0 | | 53.45 |
| 12 | 146 | 60.03 | 624.8 | | 54.84 |
| 13 | 153 | 44.64 | 443.1 | | 55.49 |
| 14 | 185 | 412.70 | 3,385.0 | | 58.44 |
| 15 | 201 | 448.20 | 3,374.1 | | 59.96 |
| 16 | 240 | 67.11 | 424.4 | | 63.38 |
| 17 | 244 | 88.54 | 548.8 | | 63.82 |
| 18 | 255 | 62.05 | 369.2 | | 64.73 |
| 19 | 288 | 287.21 | 1,510.4 | | 67.72 |
| 20 | 317 | 45.71 | 218.6 | | 70.15 |
| 21 | 327 | 54.79 | 253.9 | | 70.97 |
| 22 | 337 | 54.20 | 243.6 | | 71.80 |
| 23 | 347 | 42.37 | 184.9 | | 72.62 |
| 24 | 352 | 42.61 | 183.6 | | 72.97 |
| 25 | 373 | 75.43 | 306.0 | | 74.75 |

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-02-06\2019-02-06_001.xad

Created: 2/6/2019 2:21:22 PM
 Modified: 2/6/2019 3:02:40 PM

Electropherogram Summary Continued ...

... Peak table for sample 3 : sample 3

| Peak | Size [bp] | Conc. [pg/ μ l] | Molarity [pmol/l] | Observations | Aligned Migration Time [s] |
|------|-----------|---------------------|-------------------|--------------|----------------------------|
| 26 | 384 | 48.50 | 191.3 | | 75.61 |
| 27 | 395 | 58.11 | 222.7 | | 76.53 |
| 28 | 417 | 70.33 | 255.3 | | 77.91 |
| 29 | 450 | 27.85 | 93.7 | | 79.82 |
| 30 | 474 | 29.33 | 93.7 | | 81.21 |
| 31 | 497 | 18.08 | 55.1 | | 82.55 |
| 32 | 518 | 26.51 | 77.5 | | 83.55 |
| 33 | 545 | 7.16 | 19.9 | | 84.77 |
| 34 | 568 | 9.65 | 25.7 | | 85.85 |
| 35 | 598 | 2.53 | 6.4 | | 87.19 |
| 36 | 10,380 | 75.00 | 10.9 | Upper Marker | 113.00 |

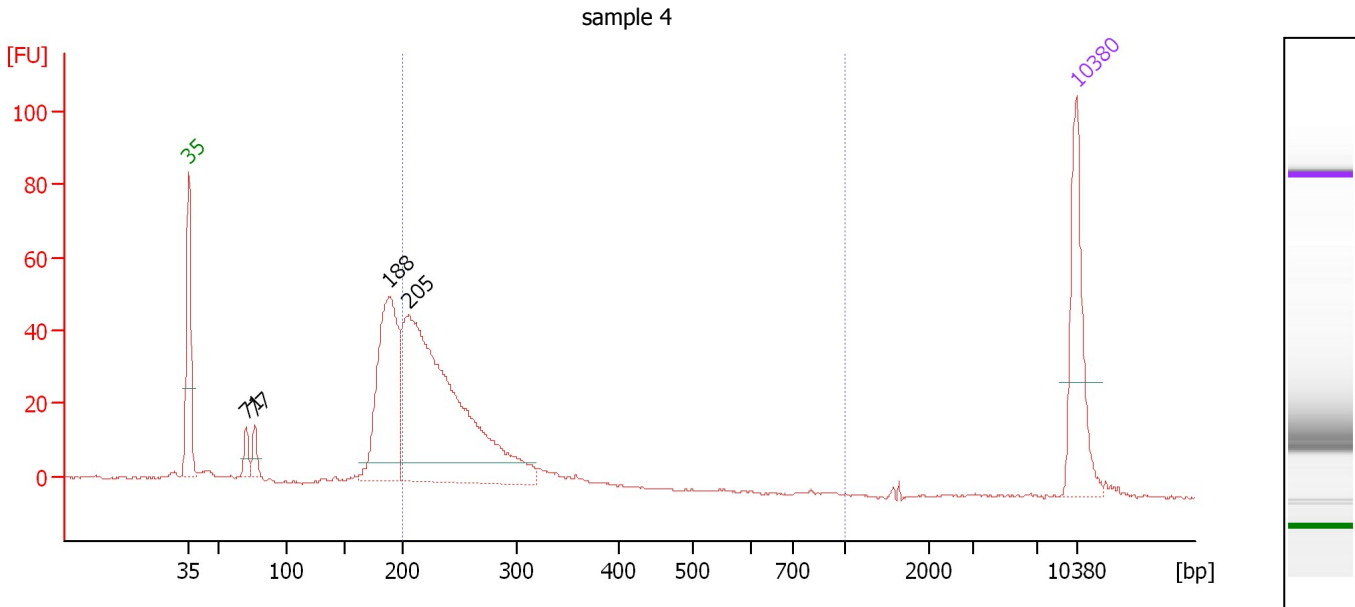
Region table for sample 3 : sample 3

| From [bp] | To [bp] | Average Size [bp] | Conc. [pg/ μ l] | Corr. Area | Molarity [pmol/l] | Co % of lor Total | Size distribution in CV [%] |
|-----------|---------|-------------------|---------------------|------------|-------------------|-------------------|-----------------------------|
| 200 | 1,000 | 327 | 1,667.61 | 1,394.4 | 8,509.7 | 62 | 26.8 |

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-02-06\2019-02-06_001.xad

Created: 2/6/2019 2:21:22 PM
 Modified: 2/6/2019 3:02:40 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : sample 4

Number of peaks found: 4 Corr. Area 1: 391.8
 Noise: 0.3

Peak table for sample 4 : sample 4

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations | Aligned Migration Time [s] |
|------|-----------|---------------|-------------------|--------------|----------------------------|
| 1 | 35 | 125.00 | 5,411.3 | Lower Marker | 43.00 |
| 2 | 71 | 17.90 | 381.6 | | 47.54 |
| 3 | 77 | 18.51 | 364.9 | | 48.17 |
| 4 | 188 | 211.72 | 1,704.2 | | 58.76 |
| 5 | 205 | 492.49 | 3,642.8 | | 60.28 |
| 6 | 10,380 | 75.00 | 10.9 | Upper Marker | 113.00 |

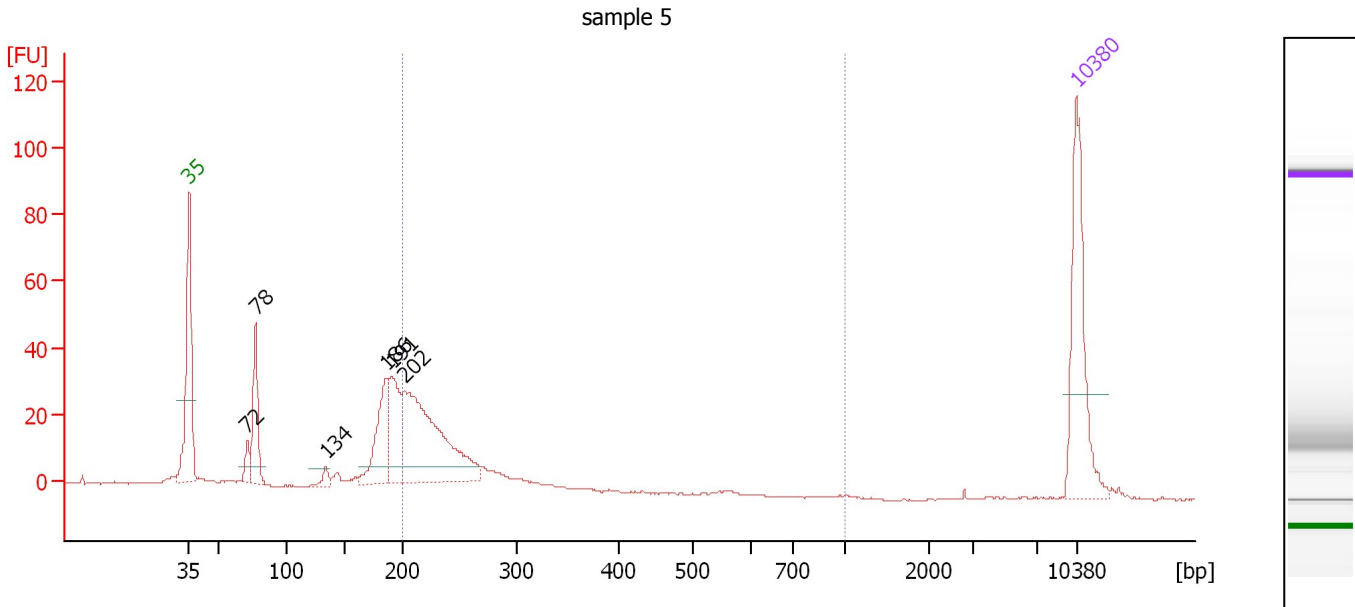
Region table for sample 4 : sample 4

| From [bp] | To [bp] | Average Size [bp] | Conc. [pg/μl] | Corr. Area | Molarity [pmol/l] | Co % of Ior Total | Size distribution in CV [%] |
|-----------|---------|-------------------|---------------|------------|-------------------|-------------------|-----------------------------|
| 200 | 1,000 | 244 | 467.78 | 391.8 | 2,953.4 | 64 | 15.4 |

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-02-06\2019-02-06_001.xad

Created: 2/6/2019 2:21:22 PM
 Modified: 2/6/2019 3:02:40 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : sample 5

Number of peaks found: 6 Corr. Area 1: 204.1
 Noise: 0.2

Peak table for sample 5 : sample 5

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations | Aligned Migration Time [s] |
|------|-----------|---------------|-------------------|--------------|----------------------------|
| 1 | 35 | 125.00 | 5,411.3 | Lower Marker | 43.00 |
| 2 | 72 | 14.45 | 305.4 | | 47.61 |
| 3 | 78 | 57.13 | 1,113.9 | | 48.25 |
| 4 | 134 | 8.23 | 93.0 | | 53.78 |
| 5 | 186 | 65.42 | 532.4 | | 58.58 |
| 6 | 191 | 59.66 | 474.0 | | 58.99 |
| 7 | 202 | 179.91 | 1,350.8 | | 60.00 |
| 8 | 10,380 | 75.00 | 10.9 | Upper Marker | 113.00 |

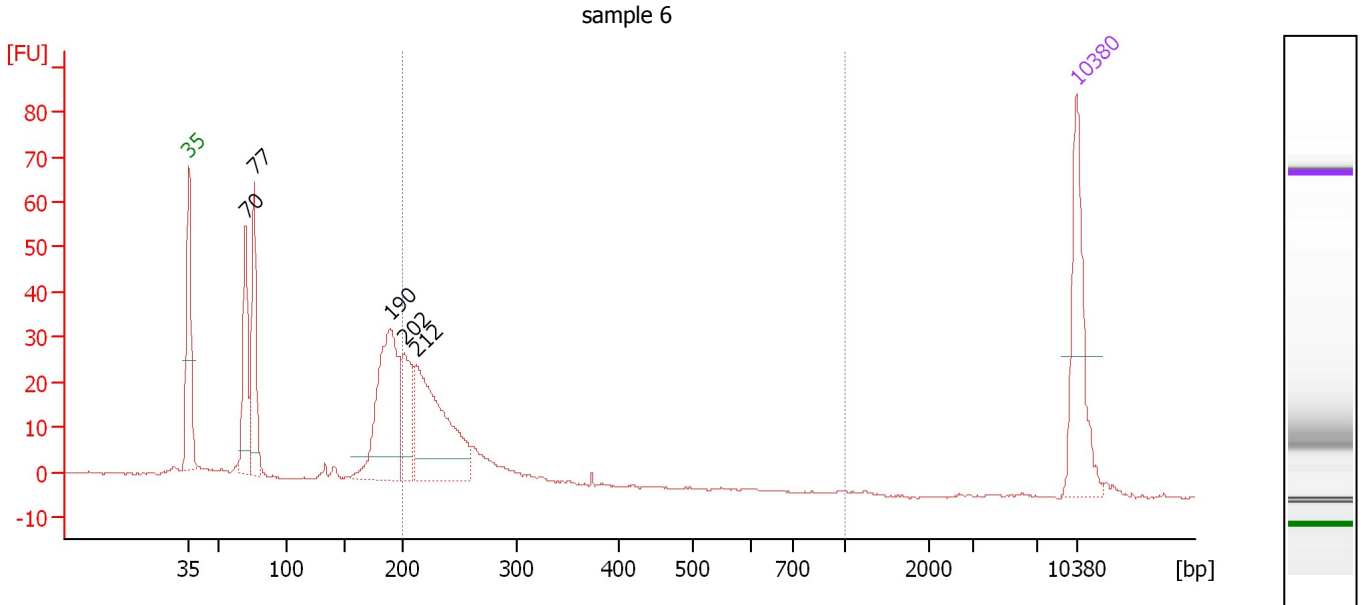
Region table for sample 5 : sample 5

| From [bp] | To [bp] | Average Size [bp] | Conc. [pg/μl] | Corr. Area | Molarity [pmol/l] | Co % of Ior Total | Size distribution in CV [%] |
|-----------|---------|-------------------|---------------|------------|-------------------|-------------------|-----------------------------|
| 200 | 1,000 | 238 | 220.30 | 204.1 | 1,418.5 | 48 | 14.7 |

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-02-06\2019-02-06_001.xad

Created: 2/6/2019 2:21:22 PM
 Modified: 2/6/2019 3:02:40 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : sample 6

Number of peaks found: 5 Corr. Area 1: 189.8
 Noise: 0.2

Peak table for sample 6 : sample 6

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations | Aligned Migration Time [s] |
|------|-----------|---------------|-------------------|--------------|----------------------------|
| 1 | 35 | 125.00 | 5,411.3 | Lower Marker | 43.00 |
| 2 | 70 | 92.73 | 1,993.9 | | 47.48 |
| 3 | 77 | 105.63 | 2,087.5 | | 48.14 |
| 4 | 190 | 176.72 | 1,410.9 | | 58.90 |
| 5 | 202 | 70.12 | 526.6 | | 60.00 |
| 6 | 212 | 176.43 | 1,258.6 | | 60.95 |
| 7 | 10,380 | 75.00 | 10.9 | Upper Marker | 113.00 |

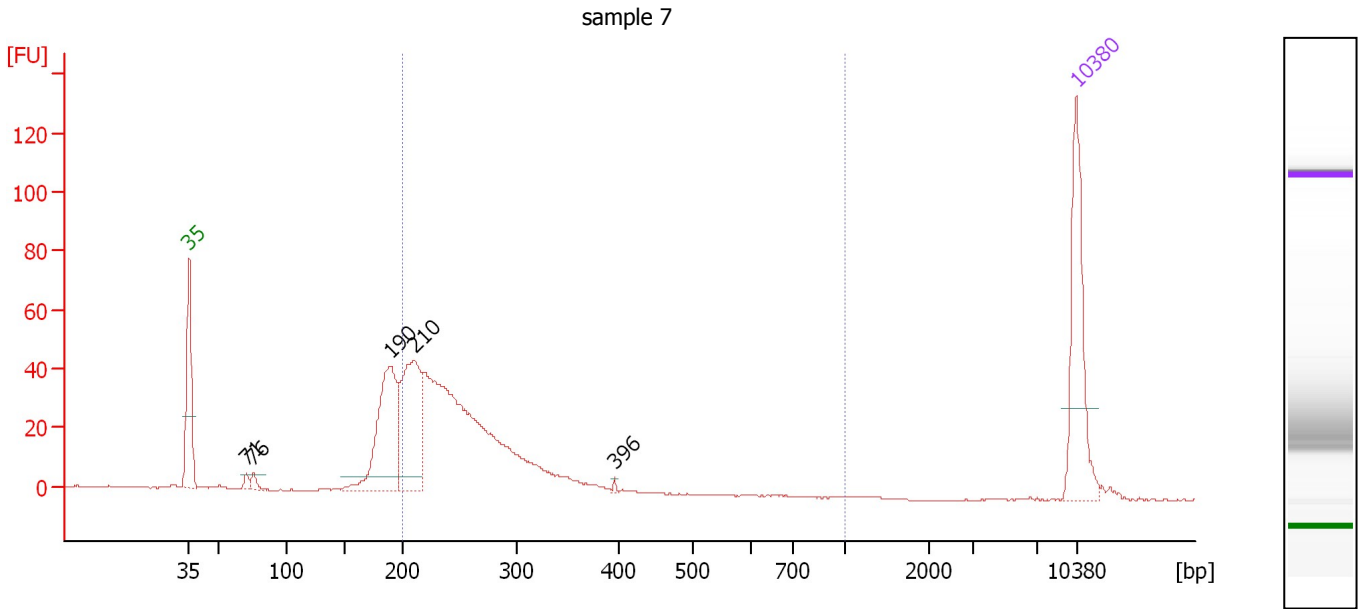
Region table for sample 6 : sample 6

| From [bp] | To [bp] | Average Size [bp] | Conc. [pg/μl] | Corr. Area | Molarity [pmol/l] | Co % of lor Total | Size distribution in CV [%] |
|-----------|---------|-------------------|---------------|------------|-------------------|-------------------|-----------------------------|
| 200 | 1,000 | 235 | 287.07 | 189.8 | 1,863.1 | 42 | 13.1 |

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-02-06\2019-02-06_001.xad

Created: 2/6/2019 2:21:22 PM
 Modified: 2/6/2019 3:02:40 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : sample 7

Number of peaks found: 5 Corr. Area 1: 473.5
 Noise: 0.2

Peak table for sample 7 : sample 7

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations | Aligned Migration Time [s] |
|------|-----------|---------------|-------------------|--------------|----------------------------|
| 1 | 35 | 125.00 | 5,411.3 | Lower Marker | 43.00 |
| 2 | 71 | 6.47 | 137.7 | | 47.55 |
| 3 | 76 | 7.27 | 144.6 | | 48.09 |
| 4 | 190 | 140.01 | 1,115.1 | | 58.95 |
| 5 | 210 | 129.70 | 934.9 | | 60.76 |
| 6 | 396 | 1.73 | 6.6 | | 76.56 |
| 7 | 10,380 | 75.00 | 10.9 | Upper Marker | 113.00 |

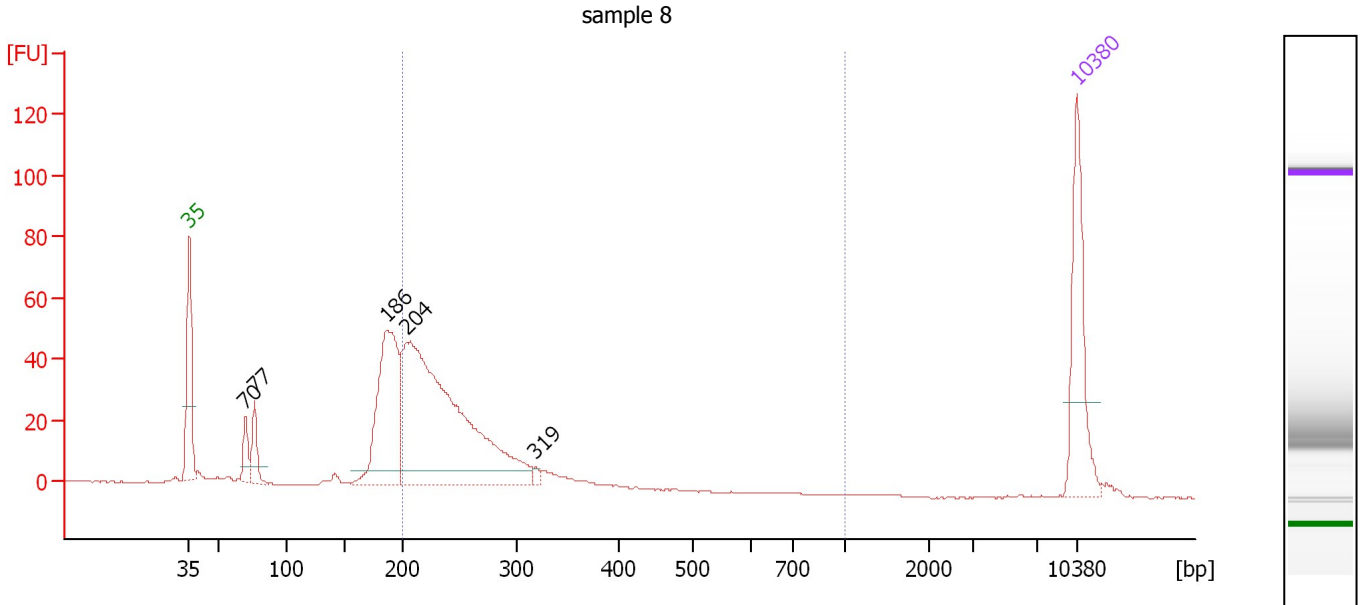
Region table for sample 7 : sample 7

| From [bp] | To [bp] | Average Size [bp] | Conc. [pg/μl] | Corr. Area | Molarity [pmol/l] | Co % of lor Total | Size distribution in CV [%] |
|-----------|---------|-------------------|---------------|------------|-------------------|-------------------|-----------------------------|
| 200 | 1,000 | 254 | 475.53 | 473.5 | 2,902.1 | 74 | 17.1 |

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-02-06\2019-02-06_001.xad

Created: 2/6/2019 2:21:22 PM
 Modified: 2/6/2019 3:02:40 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : sample 8

Number of peaks found: 5 Corr. Area 1: 414.6
 Noise: 0.2

Peak table for sample 8 : sample 8

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations | Aligned Migration Time [s] |
|------|-----------|---------------|-------------------|--------------|----------------------------|
| 1 | 35 | 125.00 | 5,411.3 | Lower Marker | 43.00 |
| 2 | 70 | 25.52 | 550.6 | | 47.45 |
| 3 | 77 | 33.05 | 648.7 | | 48.20 |
| 4 | 186 | 194.39 | 1,579.6 | | 58.60 |
| 5 | 204 | 462.10 | 3,432.5 | | 60.20 |
| 6 | 319 | 4.83 | 23.0 | | 70.30 |
| 7 | 10,380 | 75.00 | 10.9 | Upper Marker | 113.00 |

Region table for sample 8 : sample 8

| From [bp] | To [bp] | Average Size [bp] | Conc. [pg/μl] | Corr. Area | Molarity [pmol/l] | Co % of lor Total | Size distribution in CV [%] |
|-----------|---------|-------------------|---------------|------------|-------------------|-------------------|-----------------------------|
| 200 | 1,000 | 247 | 449.34 | 414.6 | 2,803.4 | 63 | 16.4 |

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-02-06\2019-02-06_001.xad

Created: 2/6/2019 2:21:22 PM
Modified: 2/6/2019 3:02:40 PM

Gel Image

